
Chapter 7

Non-Time-Critical Removal Actions

This chapter describes the process and requirements for conducting non-time-critical removal actions. It focuses on the additional analyses that must be performed and documented in an engineering evaluation/cost analysis (EE/CA). This chapter builds on the procedures outlined in Chapters 4 and 6. Module A describes the public involvement and Administrative Record file requirements that apply to non-time-critical removal actions. Module B describes requirements for identifying removal action objectives and analyzing various removal action alternatives when conducting an EE/CA. Module C describes mobilization of on-site resources and reporting progress during a non-time-critical removal action. Module D describes how to determine when a non-time-critical removal action is complete, including planning post-removal site control measures and coordinating with future planned actions.

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7.1 Introduction

7.1.1 Background

If the removal site evaluation (RSE) (see Chapter 5) indicates that a removal action is appropriate and that a planning period of at least six months exists before on-site activities must begin, a non-time-critical removal action may be conducted. Non-time-critical removal actions generally attempt to control the source of contamination and may have the potential to remediate a site completely. Non-time-critical removal actions also may help Environmental Restoration Program Managers (ERPMS) achieve prompt risk reduction prior to a remedial response. These actions typically involve a secure site, no nearby population center, storage containers in stable condition, and dangerous concentrations of hazardous or toxic substances. Because more time is available before on-site activities must begin, more time is available for investigating and planning non-time-critical removal actions than emergency or time-critical removal actions. These additional analyses are documented in the EE/CA required by section 300.415(b)(4) of the National Contingency Plan (NCP).

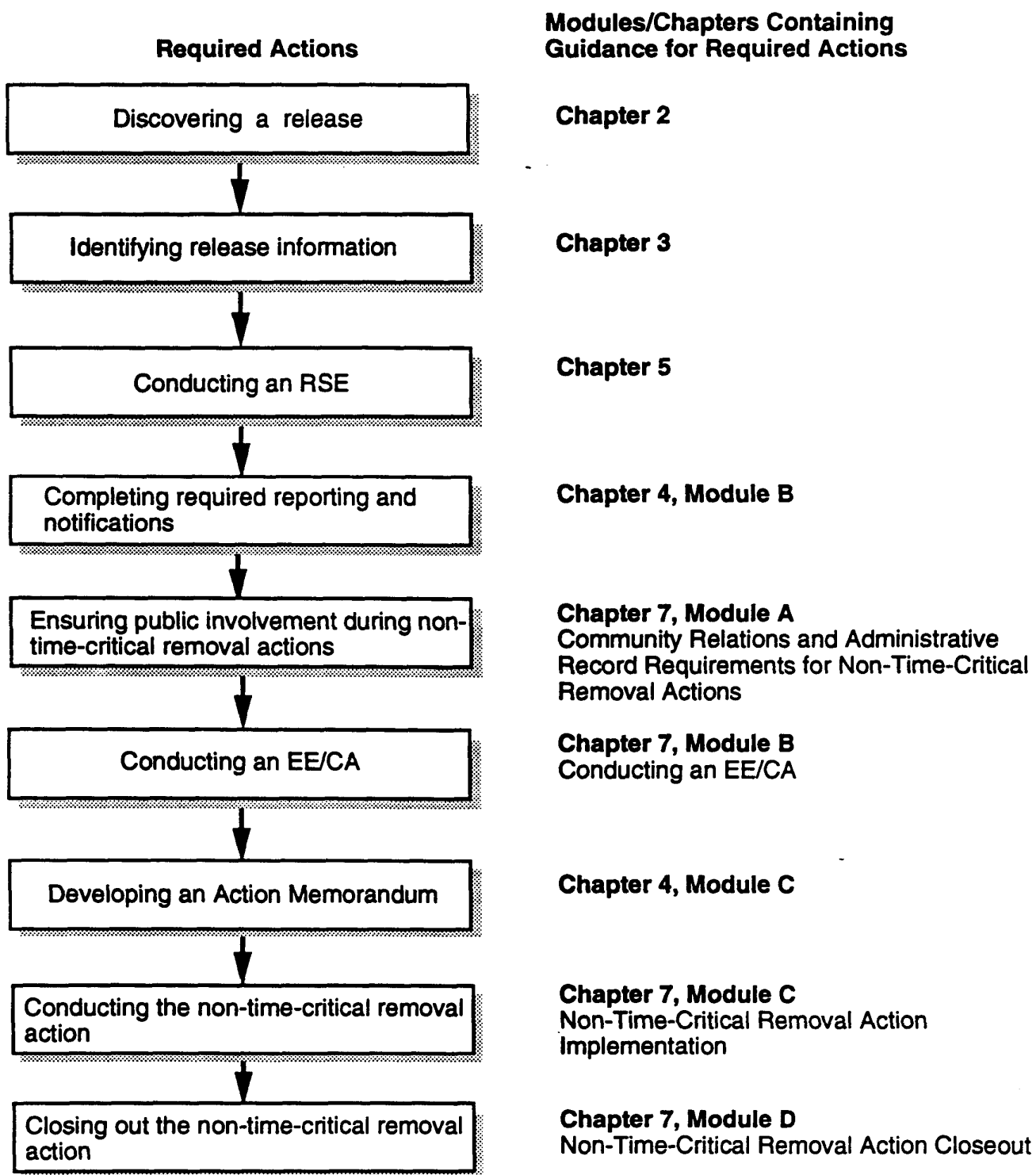
Other than the EE/CA, the process and requirements for conducting non-time-critical removal actions are similar to those for emergency and time-critical removal actions. Therefore, this chapter builds on the procedures outlined in Chapters 4 and 6. To avoid duplication, this chapter frequently refers you to other modules within this guidance for further information. *It is important to note that this chapter is not intended to aid in the development of, or in any way supplant, DOE facility emergency preparedness plans and standard operating procedures, nor is it intended as a reference for conducting specific technical activities that comprise a removal action.*

7.1.2 Major Requirements

Non-time-critical removal actions include nine required activities as shown in Figure 7-1. This chapter contains four modules specifically focusing on those activities unique to non-time-critical removal actions:

- **Module A: Community Relations and Administrative Record Requirements for Non-Time-Critical Removal Actions.** This module describes the public involvement requirements that apply to non-time-critical removal actions. [40 CFR 300.155, 300.415(m), 300.800, 300.810, 300.820, and 300.825]

Figure 7.1
Overview of Chapter 7: Non-Time-Critical Removal Actions



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- **Module B: Conducting an EE/CA.** This module describes the requirements for identifying the removal action objectives and analyzing the various removal action alternatives that may be used to satisfy the objectives. [40 CFR 300.415, 300.415(b)(2), and 300.415(b)(4)(i)]
 - **Module C: Non-Time-Critical Removal Action Implementation.** This module describes mobilization of on-site resources and reporting progress during a non-time-critical removal action. [40 CFR 300.135, 300.145, 300.150, 300.165, and 300.415]
 - **Module D: Non-Time-Critical Removal Action Closeout.** This module describes how to determine when a non-time-critical removal action is complete, including planning post-removal site control (PRSC) measures and coordinating with future planned actions.

General requirements for discovery and notification of releases are presented in Chapter 2. Procedures for identifying key information regarding releases are outlined in Chapter 3. Planning and conducting an RSE is described in Chapter 5. General requirements for preparing required reports and notifications are found in Chapter 4, Module B. The requirements for developing an Action Memorandum are found in Chapter 4, Module C.

7.2 Module A: Community Relations and Administrative Record Requirements for Non-Time-Critical Removal Actions

NOTE: ERPMs should use this module in conjunction with DOE Publication DOE/EH-0221, "Public Participation in Environmental Restoration Activities," November 1991 and EPA Publication No. 9360.3-05, "Public Participation Guidance for On-Scene Coordinators: Community Relations and the Administrative Record," July 1992.

7.2.1 Introduction Chapter 4, Module D, and Chapter 6, Module A, describe the community relations and Administrative Record requirements for emergency and time-critical removal actions, respectively. The same objectives and basic requirements for community relations and the Administrative Record file also apply to non-time-critical removal actions. However, since non-time-critical removal actions have at least a 6-month planning period, additional community relations and Administrative Record file requirements are required by sections 300.415(m)(4) and 300.825 of the NCP. The ERPM also is encouraged to consider public participation activities beyond those required by the NCP to ensure that the community is informed.

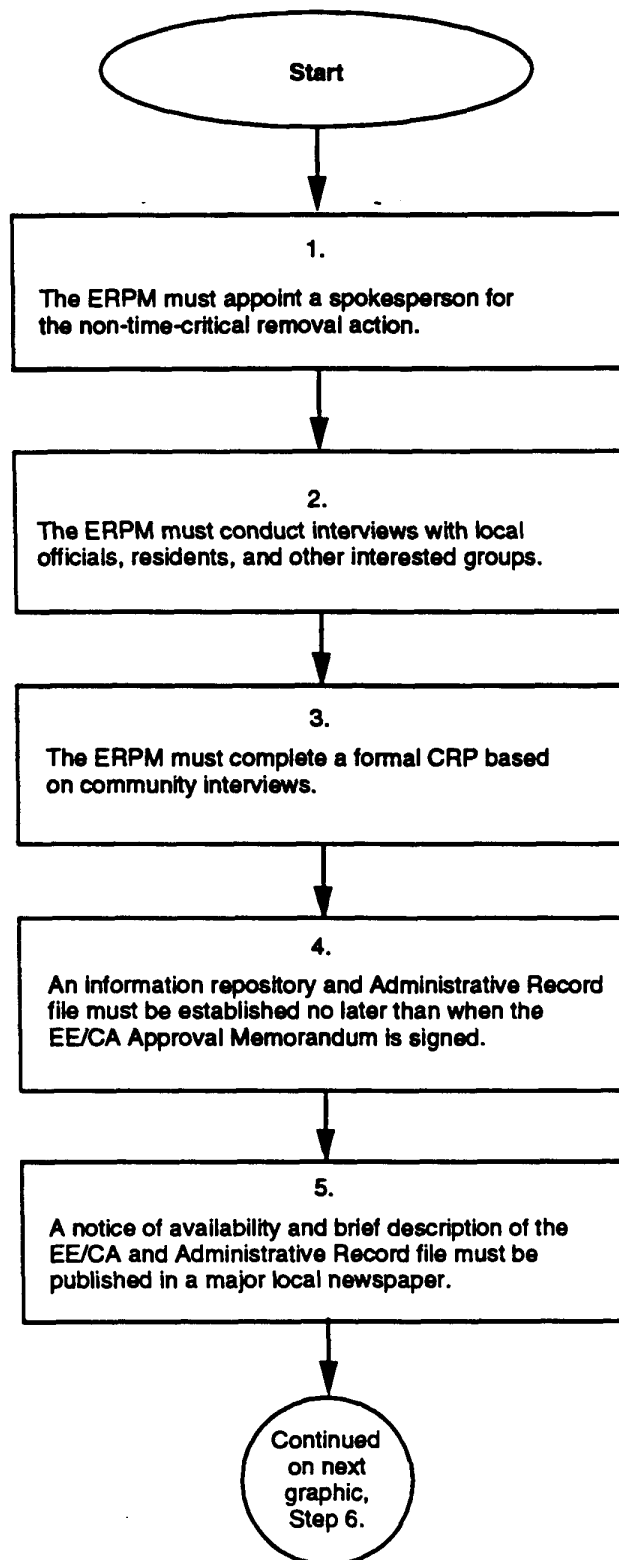
7.2.2
Milestones

In developing a public outreach program and the Administrative Record for non-time-critical removal actions, the ERPM should ask the following questions:

- Has a DOE spokesperson for the non-time-critical removal action been designated?
- Have community interviews been conducted?
- Has a formal Community Relations Plan (CRP) been prepared?
- Have a local information repository and Administrative Record file been established before the EE/CA Approval Memorandum was signed?
- Has notice of the availability and contents of the EE/CA and Administrative Record file been published in a major local newspaper?
- Have the EE/CA and Administrative Record file been publicly available for review and comment for at least 30 days?
- Has the public comment period been extended by at least 15 days, if requested?
- Have written responses to significant comments been prepared?

The following flowchart guides you through the process of developing a community relations program and Administrative Record for non-time-critical removal actions.

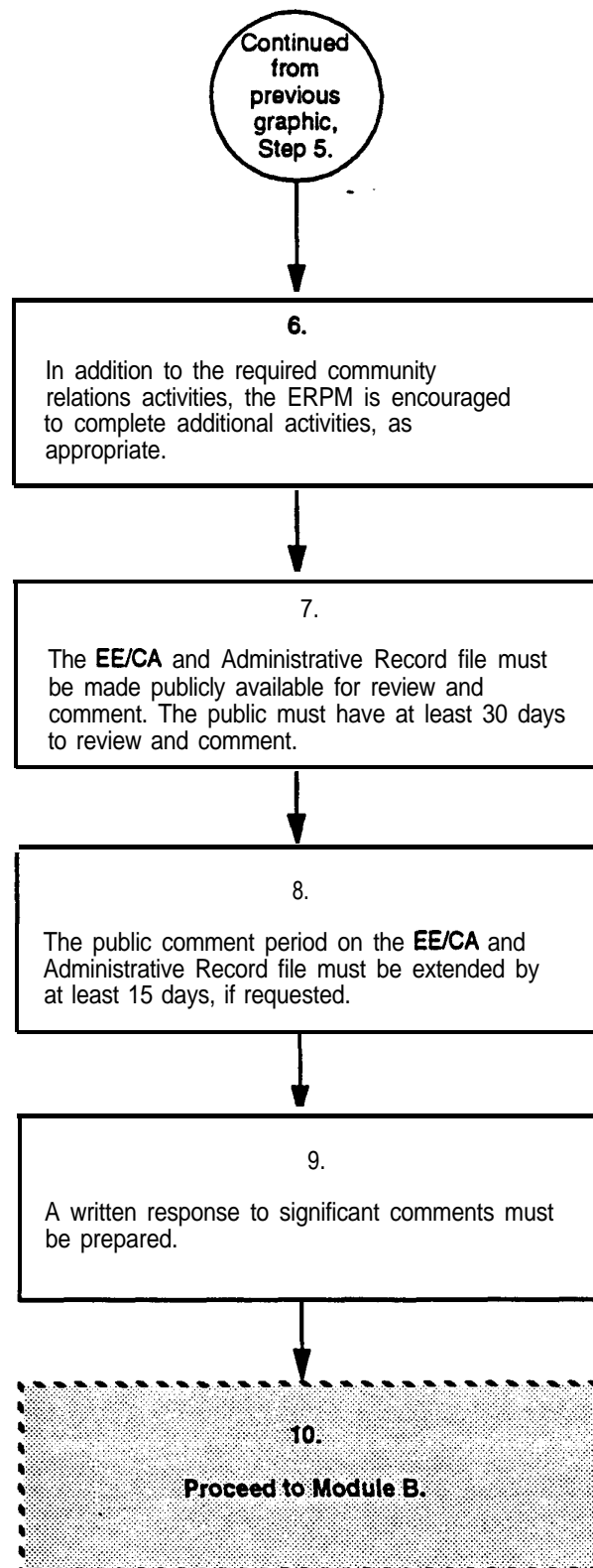
Figure 7.2(1)
Community Relations and Administrative Record Requirements
for Non-Time-Critical Removal Actions



7.2.3 Community Relations and Administrative Record Requirements for Non-Time-Critical Removal Actions

- Step 1 See Chapter 4, Module D, Step 1.
- Step 2 The ERPM, pursuant to section 300.415(m)(4)(i) of the NCP, must conduct community interviews prior to completing the EE/CA. Interviews with local officials, community residents, public interest groups, or other interested or affected parties, as appropriate, must be conducted to solicit their concerns, information needs, and how or when they would like to be involved in the cleanup process.
- Step 3 As described in section 300.415(m)(4)(i) of the NCP, the ERPM will prepare a formal CRP based on the community interviews and other relevant information. The CRP specifies the community relations activities that will be undertaken during the response. The CRP must be prepared prior to completing the EE/CA. In addition to the CRP, DOE has developed site-wide and program-specific public participation plans at many facilities. These plans may serve as the foundation for removal action-specific CRPs. Module B describes the purpose and requirements for completing an EE/CA Approval Memorandum and EE/CA.
- Step 4 In accordance with section 300.415(m)(4)(i) of the NCP, at least one local information repository must be established at or near the location of the non-time-critical removal action. The information repository must contain a copy of the Administrative Record file (see Chapter 4, Module D, Step 2) and may contain copies of relevant statutes and regulations, general information about DOE's cleanup program, and site-specific press releases or newspaper clippings. All items in the repository must be available for public inspection and copying. The repository must be established no later than when the EE/CA Approval Memorandum is signed.
- Step 5 Section 300.820(a)(1) of the NCP requires that the Administrative Record file be available for public inspection and comment when the EE/CA is made available for public comment (see Module B). At that time, the ERPM must publish in a major local newspaper of general circulation a notice of the availability and a brief description of the EE/CA and the Administrative Record file. Module B describes the purpose and requirements for completing an EE/CA Approval Memorandum and EE/CA.

Figure 7.2(2)
Community Relations and Administrative Record Requirements
for Non-Time-Critical Removal Actions



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- Step 6 Since a longer planning period exists for non-time-critical removal actions and there is a greater potential for completely remediating a site, it is recommended that additional community relations activities be considered. The ERPM should refer to Chapter 6, Module A, Step 7 for a description of recommended additional activities.
- Step 7 Section 300.415(m)(4)(iii) of the NCP requires a 30-day public comment period on the EE/CA and the Administrative Record file beginning from the date they are made available for public comment.
- Step 8 The public comment period must be extended for a minimum of 15 days upon timely receipt of a request (defined in the NCP preamble as generally within 2 weeks after the public comment period starts).
- Step 9 Each significant public comment is required to have a written response. The response must be made publicly available in the Administrative Record.
- Step 10 Completing Steps 1–9 fulfills the community relations and Administrative Record file requirements for non-time-critical removal actions. The ERPM should proceed to Module B to implement a non-time-critical removal action.

7.3 Module B: Conducting an EE/CA

7.3.1 The ERPM must complete an EE/CA for all non-time-critical removal actions, as required by section 300.415(b)(4)(i) of the NCP. An EE/CA identifies the removal action objectives, which are based on the factors listed in section 300.415(b)(2)(i)-(viii) of the NCP. Following identification of the removal action objectives, the ERPM analyzes the effectiveness, implementability, and cost of various alternatives that may satisfy these objectives. The result of the EE/CA is a recommendation of the best cleanup alternative.

Introduction

The EE/CA Approval Memorandum and EE/CA analysis is placed in the Administrative Record. The EE/CA process consists of preparing an EE/CA Approval Memorandum, conducting the EE/CA, and documenting the EE/CA. The ERPM prepares the EE/CA Approval Memorandum to document that the site meets the NCP criteria for initiating a non-time-critical removal action and to secure management approval and funding. The EE/CA includes: site visits, sampling analysis, and identification of removal action objectives including applicable or relevant and appropriate requirements (ARARs), and analysis of removal action alternatives. The EE/CA and EE/CA Approval Memorandum must be documented and placed in the Administrative Record file for public review.

More information on the EE/CA process can be found in EPA Publication 9360.0-32, "Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA," August 1993.

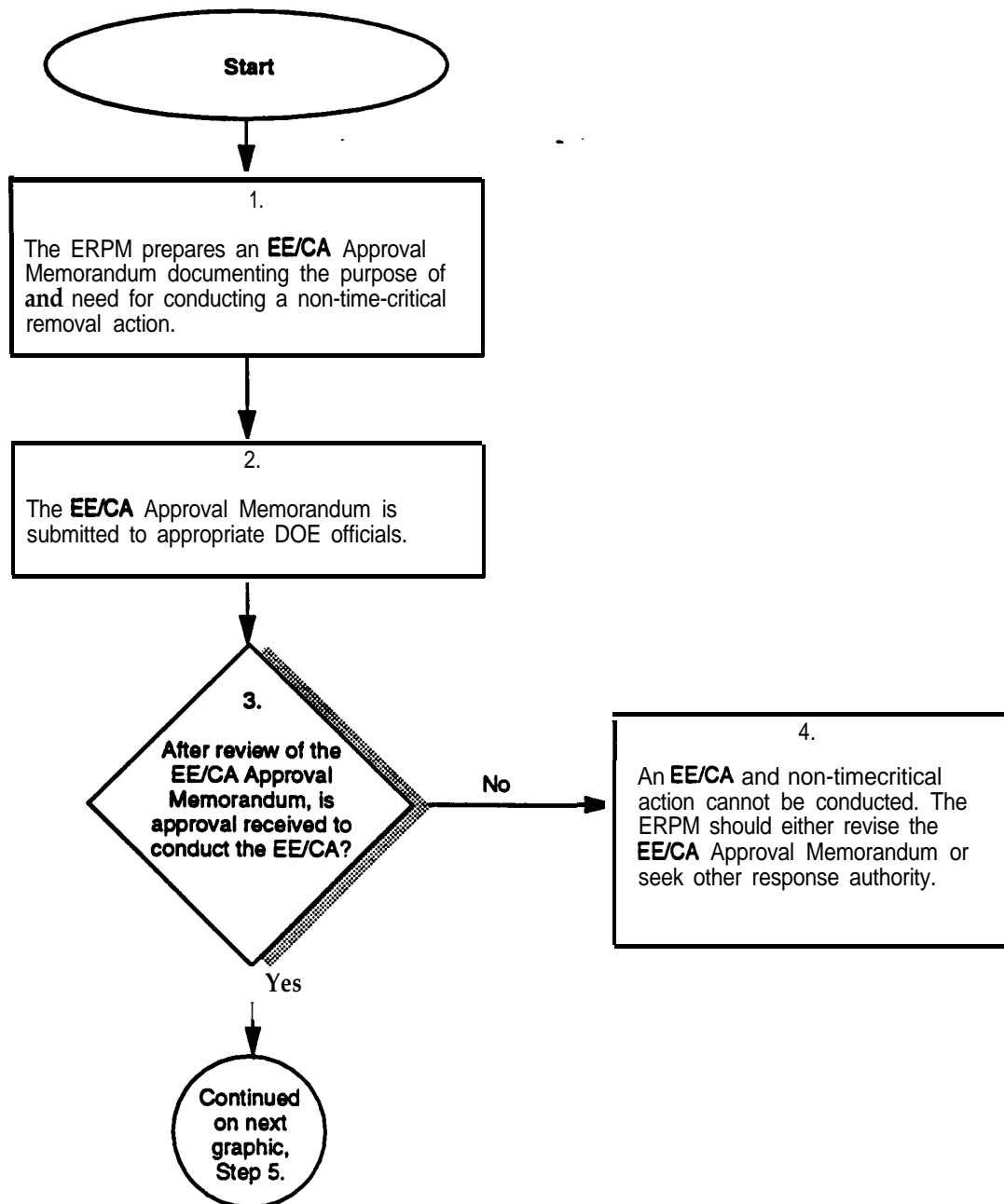
7.3.2
Milestones

In conducting an EE/CA for non-time-critical removal actions, the ERPM should ask the following questions:

- Has an EE/CA Approval Memorandum been prepared and submitted to appropriate DOE officials?
- Has the EE/CA been approved?
- Have a Health and Safety Plan (HASP) and Sampling and Analysis Plan been approved?
- Have site visits and sampling analyses been conducted?
- Does the EE/CA:
 - Describe the site and nature of the threat?
 - Identify removal action objectives?
 - List and analyze each alternative?
 - Recommend one alternative?
- Has the EE/CA been placed in the Administrative Record file?

The following flowchart guides you through the process of conducting an EE/CA.

Figure 7.3(1)
Conducting an **EE/CA**



7.3.3 Conducting an EE/CA

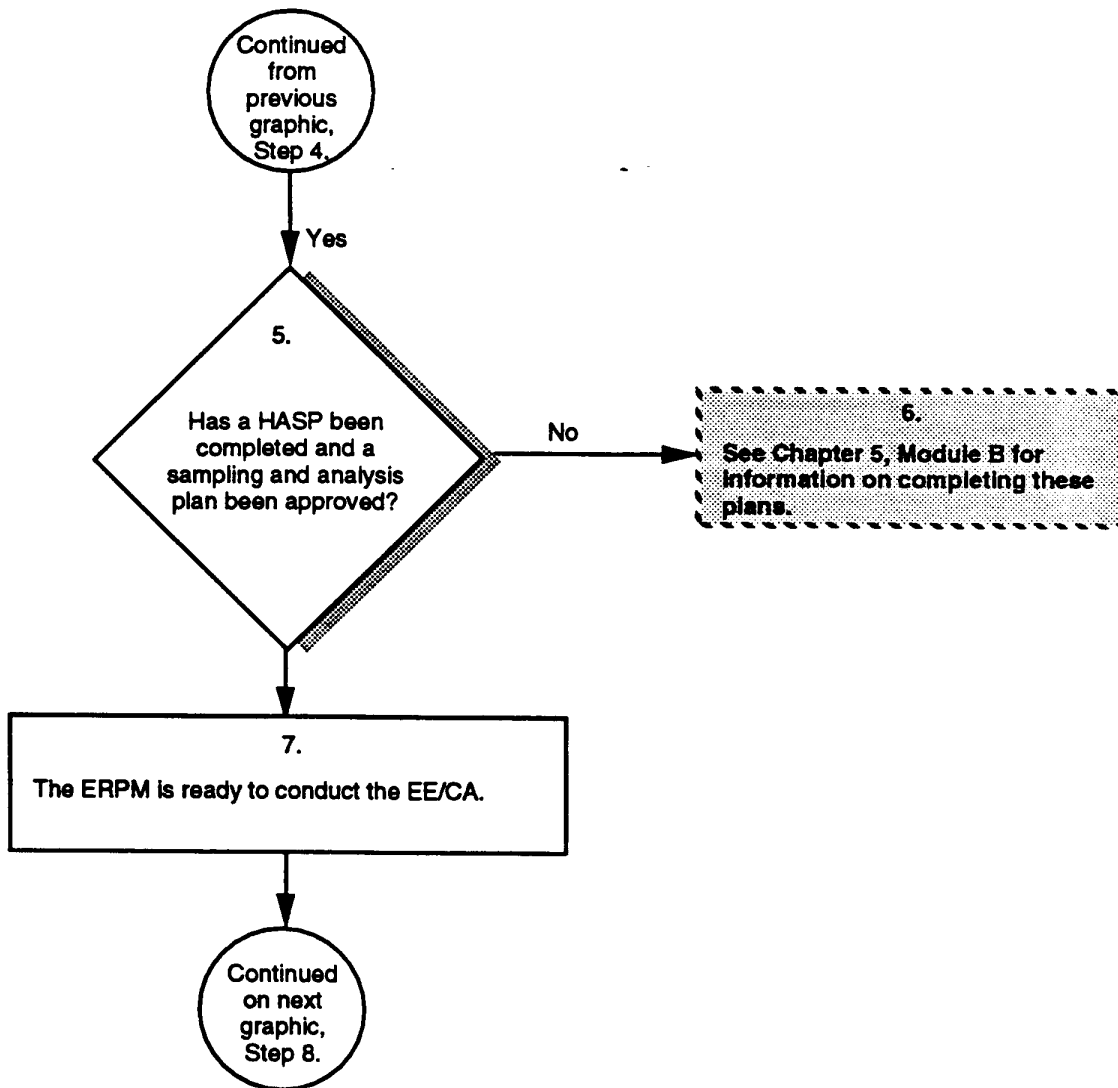
- Step 1** The ERPM prepares the EE/CA Approval Memorandum to document that the situation meets the NCP criteria for initiating a non-time-critical removal action and to secure management approval to fund and conduct the EE/CA. The EE/CA Approval Memorandum includes: 1) background of the situation; 2) summary of the threat posed to public health, welfare, or the environment (including expected changes in the situation if no action is taken) and, if present, a finding of imminent and substantial endangerment; and 3) a description of the proposed project and cost. The EE/CA Approval Memorandum is not part of the EE/CA, but is part of the Administrative Record for the site.

Model EE/CA Approval Memorandum Outline

- | |
|--|
| <ul style="list-style-type: none"><input type="checkbox"/> Subject<input type="checkbox"/> Background<input type="checkbox"/> Threat to Public Health, Welfare, or the Environment
(Includes Expected Change If No Action Taken)<input type="checkbox"/> Imminent and Substantial Endangerment If Present<input type="checkbox"/> Enforcement Actions (if appropriate)<input type="checkbox"/> Proposed Project/Oversight and Cost<input type="checkbox"/> Approval/Disapproval to Conduct EE/CA |
|--|

- Step 2** The ERPM should submit the EE/CA Approval Memorandum to appropriate DOE officials.
- Step 3** The appropriate DOE officials must sign the EE/CA Approval Memorandum before the EE/CA can proceed. An FFA or IAG may require review and/or approval of the EE/CA Approval Memorandum by EPA or state officials.
- Step 4** If the EE/CA Approval Memorandum is not approved, the ERPM may revise the Memorandum to address concerns. If the concerns cannot be adequately addressed, the ERPM may determine that other response authorities may be more appropriate for remediating the site or that no further action is warranted (refer to Chapter 3, Module C).

Figure 7.3(2)
Conducting an EE/CA

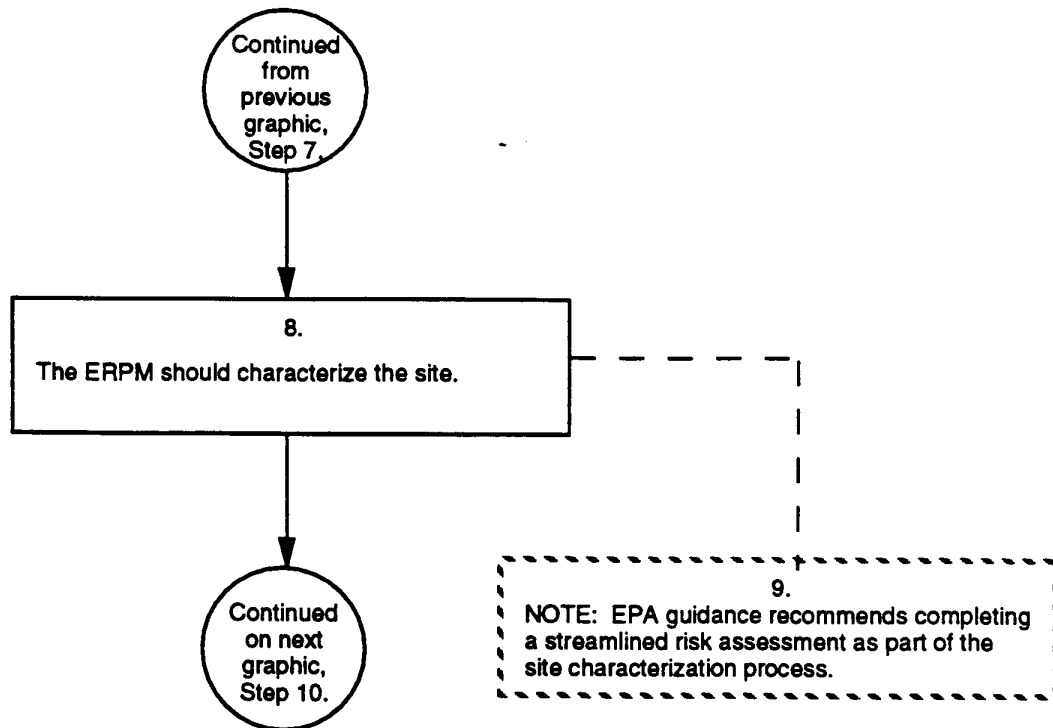


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- Step 5** To conduct an EE/CA, generally a site visit and sampling for contamination is required. Both a HASP and a sampling and analysis plan are needed for additional sampling investigations conducted during an EE/CA. *For non-time-critical removal actions, section 300.415(b)(4) requires that EPA review and approve all sampling and analysis plans.* Prior to entering a site, a HASP must be completed and implemented. If a HASP was completed during the RSE, then it may be updated to reflect current site conditions.
- Step 6** See Chapter 5, Module B.
- Step 7** Completion of an EE/CA includes six major steps. An outline of an EE/CA is presented below, and the major parts are described in Steps 8 and 10-14.

Model EE/CA Outline

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Executive Summary |
| <input type="checkbox"/> | Site Characterization |
| | <input type="checkbox"/> Site description and background |
| | <input type="checkbox"/> Previous removal actions |
| | <input type="checkbox"/> Source, nature, and extent of contamination |
| | <input type="checkbox"/> Analytical data |
| | <input type="checkbox"/> Streamlined risk evaluation |
| <input type="checkbox"/> | Identification of Removal Action Objectives |
| | <input type="checkbox"/> Statutory limits on removal actions |
| | <input type="checkbox"/> Determination of removal scope |
| | <input type="checkbox"/> Determination of removal schedule |
| | <input type="checkbox"/> Planned remedial activities |
| <input type="checkbox"/> | Identification and Analysis of Removal Action Alternatives |
| | <input type="checkbox"/> Effectiveness |
| | <input type="checkbox"/> Implementability |
| | <input type="checkbox"/> Cost |
| <input type="checkbox"/> | Comparative Analysis of Removal Action Alternatives |
| <input type="checkbox"/> | Recommended Removal Action Alternative |

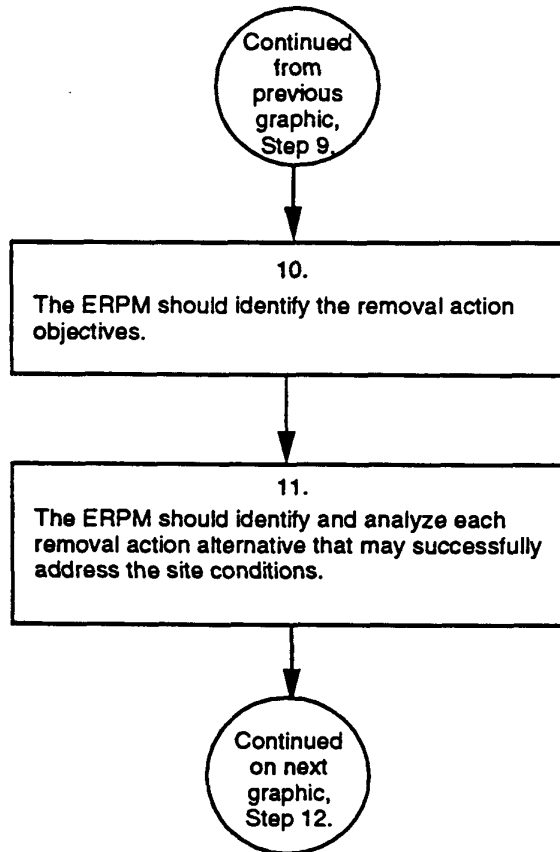
Figure 7.3(3)
Conducting an EE/CA



Step 8 The EE/CA should describe available data on the physical, demographic, and other characteristics of the site. Appropriate information to gather includes: (1) a site description; (2) previous removal actions; (3) source, nature, and extent of contamination; (4) analytical data; and (5) data appropriate for conducting a streamlined risk evaluation. The site description and background may provide information on site location; type of facility and operational status, structures and/or topography; geology and/or soil; surrounding land use and populations; sensitive ecosystems; and meteorology. Data from previous removal actions may provide information on the nature and extent of contaminants, treatability of compounds, equipment or utilities at the site, and site-specific conditions. The source, nature, and extent of contamination is derived from sampling data, previous removal actions, or other relevant documents and should describe location and physical and chemical attributes of hazardous substances, pollutants or contaminants; quantity, volume, size, and magnitude of the contamination; and targets potentially affected by the site. The analytical data presents quantifiable data on the nature and extent of contaminants, site geology, treatability of contaminants, and other relevant data. The streamlined risk evaluation uses sampling data from the site to identify the chemicals of concern, provides an estimate of how and to what extent people and ecological receptors might be exposed to them, and provides an assessment of their health and ecological effects.

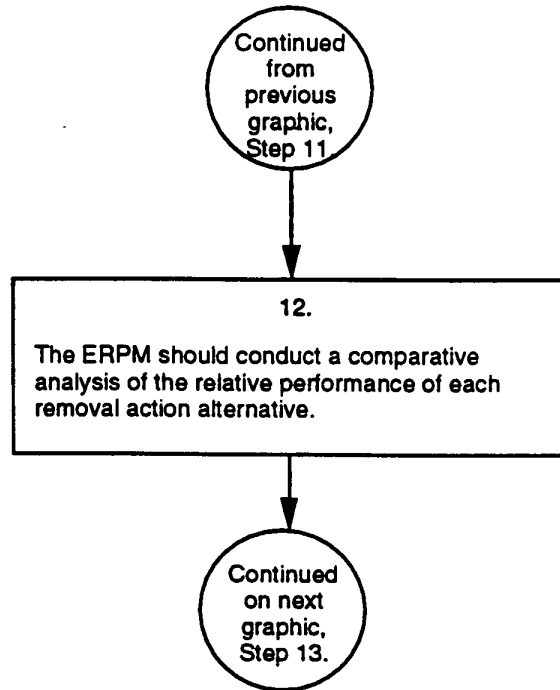
Step 9 EPA's Guidance on Conducting Non-Time-Critical Removal Actions (EPA Publication No. 9360.0-32) describes the streamlined risk evaluation, which is used to help justify taking a removal action and identify current or potential exposures. Streamlined risk evaluation is a type of evaluation, intermediate in scope between the limited risk evaluation undertaken for emergency removal actions and the conventional baseline risk assessment normally conducted for remedial actions. The streamlined risk evaluation should focus on the specific problem that the removal action is intended to address. For example, if the non-time-critical removal action is to install a ground water containment system, the streamlined risk evaluation should address risk due to consumption and use of ground water. If the non-time-critical removal action is intended to address a particular source of contamination, the streamlined risk evaluation should address the risks related only to that source of contamination.

Figure 7.3(4)
Conducting an EE/CA



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- Step 10** The ERPM should identify the overall and specific removal action objectives. The specific objectives of the removal action clearly define the goals of the non-time-critical removal action, which should be achieved by meeting specified cleanup levels and attaining ARARs to the extent practicable. Sections 300.415(b)(2)(i)-(viii) of the NCP provide a list of factors to consider in determining specific removal objectives. The removal action objectives should also support the completion of any remedial actions.
- Step 11** The ERPM should identify the removal action alternatives. Each of the removal action alternatives should be analyzed individually to determine their effectiveness, implementability, and cost. For removal actions, a limited number of alternatives should be selected for detailed analysis. The effectiveness criterion refers to the ability to meet the removal objective within the scope of the removal action and in terms of overall protection of public health and the environment. The implementability criterion addresses the technical and administrative feasibility of implementing an alternative and the availability of various services and materials required during its implementation. To analyze the cost of each alternative, the direct and indirect capital costs and the PRSC costs of each alternative should be projected.

Figure 7.3(5)
Conducting an EE/CA

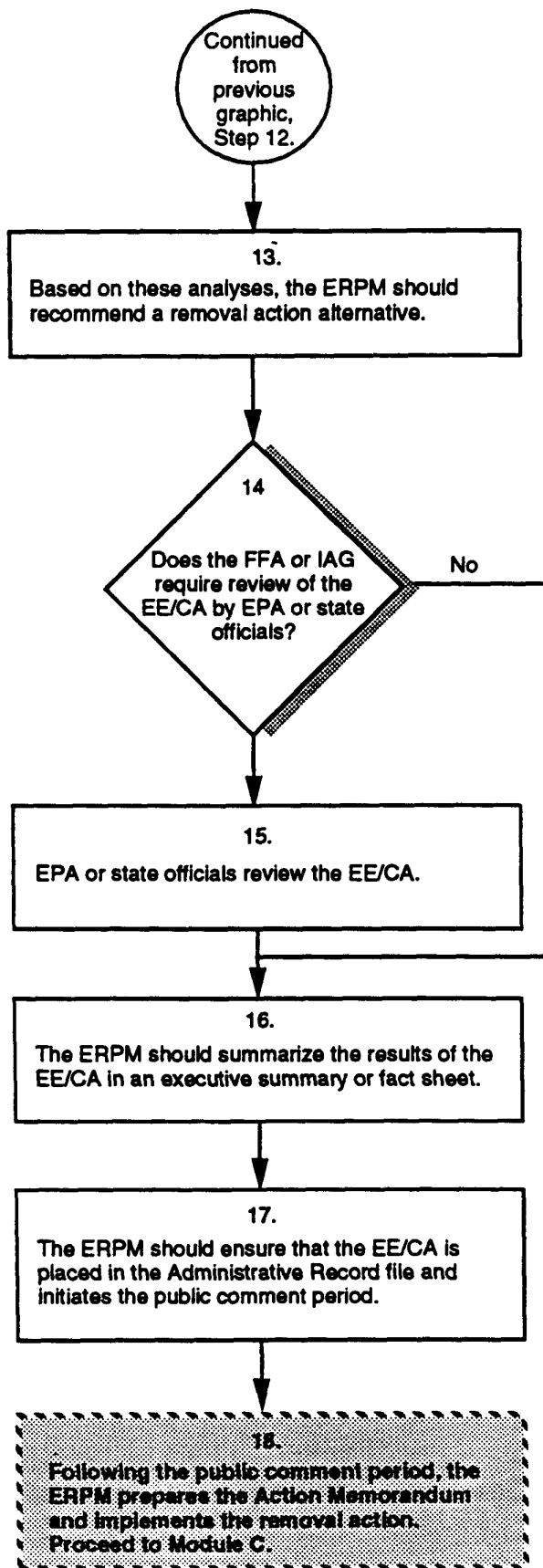


Step 12 A comparative analysis should be prepared to address the relative performance of each removal action alternative in relation to its relative effectiveness, implementability, and cost. The purpose of this analysis is to identify the advantages and disadvantages among the alternatives. The key tradeoffs between the removal action alternatives should be highlighted. The following table from EPA's guidance on "Conducting Non-Time-Critical Removal Actions" highlights the criteria that should be used to complete the comparative analysis.

Model Objectives/Criteria To Be Used in Comparative Analysis of Alternatives

- ☐ Effectiveness
 - ☐ Protectiveness
 - ☐ Protective of public health and community
 - ☐ Protective of workers during implementation
 - ☐ Protective of the environment
 - ☐ Complies with ARARs
 - ☐ Ability to Achieve Removal Objectives
 - ☐ Level of treatment/containment expected
 - ☐ No residual effect concerns
 - ☐ Will maintain control until long-term solution implemented
- ☐ Implementability
 - ☐ Technical Feasibility
 - ☐ Construction and operational considerations
 - ☐ Demonstrated performance/useful life
 - ☐ Adaptable to environmental conditions
 - ☐ Contributes to remedial performance
 - ☐ Can be implemented in 1 year
 - ☐ Availability
 - ☐ Equipment
 - ☐ Personnel and services
 - ☐ Outside laboratory testing capacity
 - ☐ Off-site treatment and disposal capacity
 - ☐ PRSC
 - ☐ Administrative Feasibility
 - ☐ Permits required
 - ☐ Easements or right-of-ways required
 - ☐ Impact on adjoining property
 - ☐ Ability to impose institutional controls
 - ☐ Likelihood of obtaining an exemption from statutory limits (if needed)
- ☐ Cost
 - ☐ Capital cost
 - ☐ PRSC cost
 - ☐ Present worth cost

Figure 7.3(6)
Conducting an EE/CA



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- Step 13** Based on the comparative analysis, the ERPM should recommend a removal action. It is important that the basis for the recommended removal action be clearly described, since the EE/CA is part of the Administrative Record and, therefore, available for public review and comment.
- Step 14** In some cases the FFA or IAG applicable to the site may require review/approval of the EE/CA by EPA or state officials. Check the relevant agreements for applicable requirements.
- Step 15** EPA or state officials review the EE/CA. The ERPM should address their comments to ensure compliance with agreements and improve the EE/CA.
- Step 16** To assist the public's review of the EE/CA, the ERPM should summarize the EE/CA in an executive summary or fact sheet. This summary should contain a general overview and discussion of the site, the removal action objectives, analysis of removal action alternatives, and recommended action.
- Step 17** The ERPM should ensure that the EE/CA and executive summary or fact sheet of the EE/CA are placed in the Administrative Record file. Following public comment, the summary of the EE/CA may be used to develop the Action Memorandum. Because the EE/CA is subject to public review and comment, the recommended alternative in the EE/CA may be changed in the Action Memorandum to address public concerns. If the recommended alternative differs from the final selected alternative, the Action Memorandum and the Administrative Record should provide enough detail to explain the change.
- Step 18** For further information on completing the public participation and Action Memorandum requirements refer to Module A and Chapter 4, Module C. Following completion of the Action Memorandum, which is based on the EE/CA, proceed to Module C to implement on-site removal activities.

7.4 Module C: Non-Time-Critical Removal Action Implementation

7.4.1 Introduction The ERPM is responsible for all removal action decisions, plans, and on-site activity. The ERPM directs, manages, and reviews the work of DOE personnel, other participating agencies, responsible parties, if applicable, and contractors to ensure compliance with CERCLA and the NCP, and reviews all decision documents and plans related to the response. This module guides the ERPM through the unique requirements and procedures for implementing non-time-critical removal actions. General requirements for implementing all removal actions are presented in Chapter 4, Module E. This module does not provide guidance on the engineering and design specifications for non-time-critical removal actions.

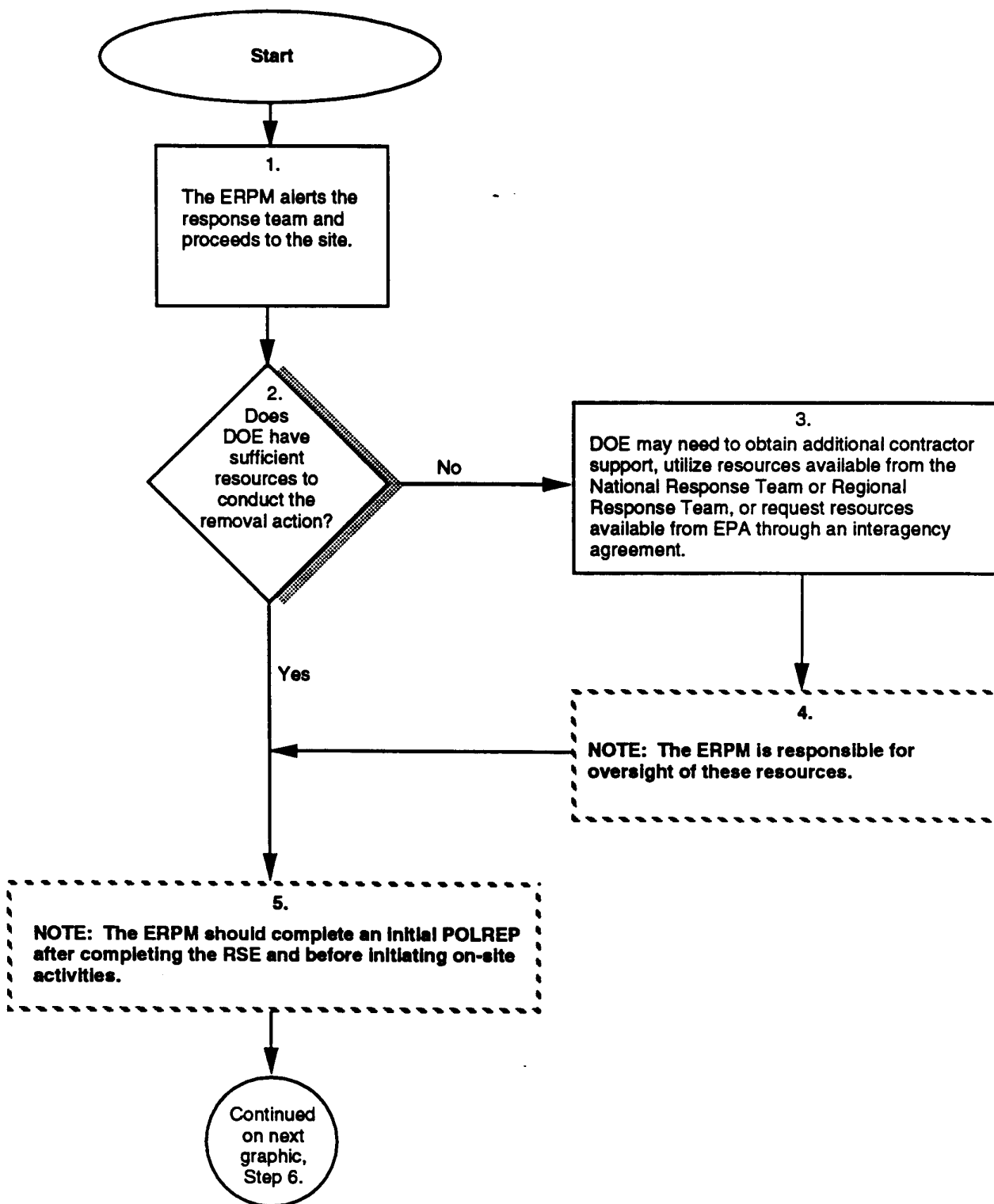
7.4.2 Milestones

In implementing non-time-critical removal actions, the ERPM should ask the following questions:

- Has an EE/CA Approval Memorandum and EE/CA been completed?
- Does DOE have sufficient resources to conduct the removal action?
- Has a pollution report (POLREP) been completed?
- Has a HASP been prepared during the RSE, and have health and safety requirements been communicated to the response team?
- Have the field Sampling Plan and Quality Assurance Project Plan been completed and approved by EPA?
- Are proposed and actual removal action activities consistent with local/facility contingency plans?
- Has the Action Memorandum been completed?
- Is evacuation of facility personnel and/or the local community required?
- Are community relations activities underway?
- Were other federal and state responders or technical assistance units notified?
- Have progress and special POLREPs been prepared, as required?
- Have removal action wastes been disposed of properly?
- Has the removal action Final Report been prepared?
- Is the non-time-critical removal action complete?
- Are further response actions necessary at the site?

The following flowchart guides you through the process of implementing a non-time-critical removal action.

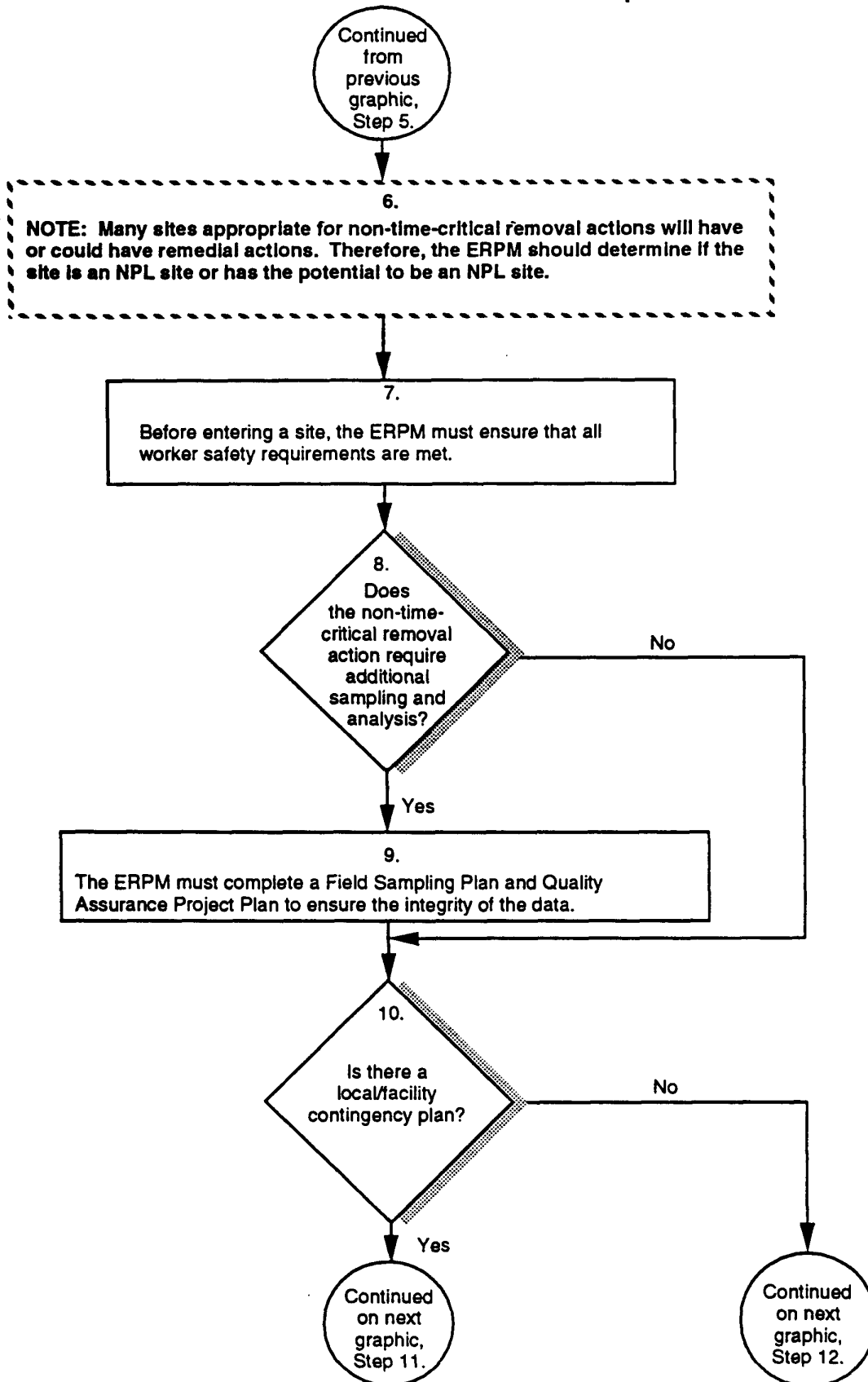
Figure 7.4(1)
Non-Time-Critical Removal Action Implementation



7.4.3 Non-Time-Critical Removal Action Implementation

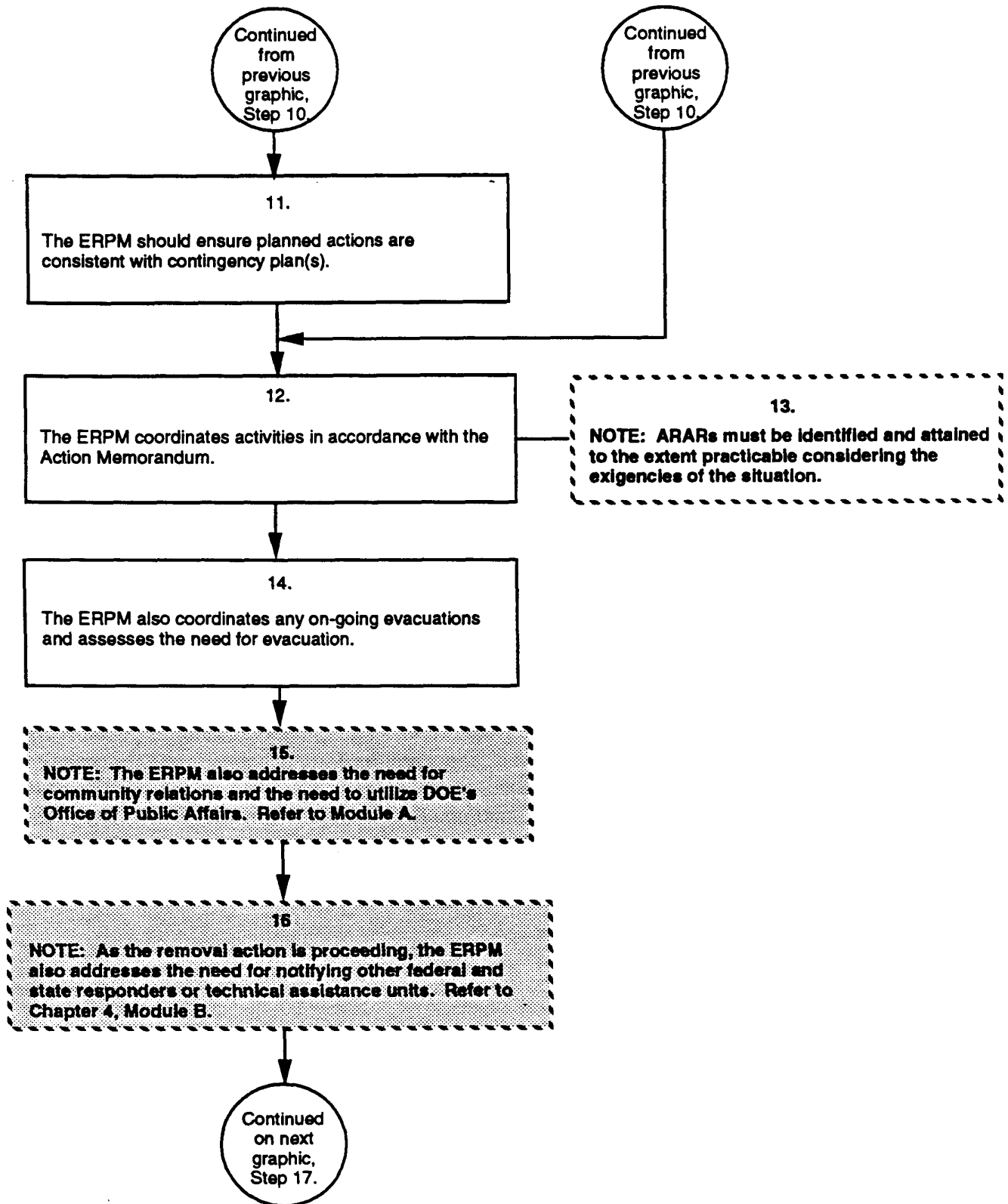
- Step 1** The ERPM initiates on-site activities to implement the activities outlined in the Action Memorandum for the non-time-critical removal action (see Chapter 4, Module C). In addition to the Action Memorandum, information characterizing the site can be found in the EE/CA (see Module B). Based on information presented in the Action Memorandum and EE/CA, the ERPM should be able to determine the personnel, equipment, and financial resources necessary to conduct the non-time-critical removal action.
- Step 2** Non-time-critical removal actions are often more costly than emergency or time-critical removal actions because of the additional required analyses (e.g., EE/CA). The ERPM should use all available resources to conduct the non-time-critical removal action. See Chapter 4, Module E, Step 2.
- Step 3** See Chapter 6, Module B, Step 3.
- Step 4** See Chapter 4, Module E, Step 4.
- Step 5** See Chapter 4, Module E, Step 6 and Chapter 4, Module B.

Figure 7.4(2)
Non-Time-Critical Removal Action Implementation



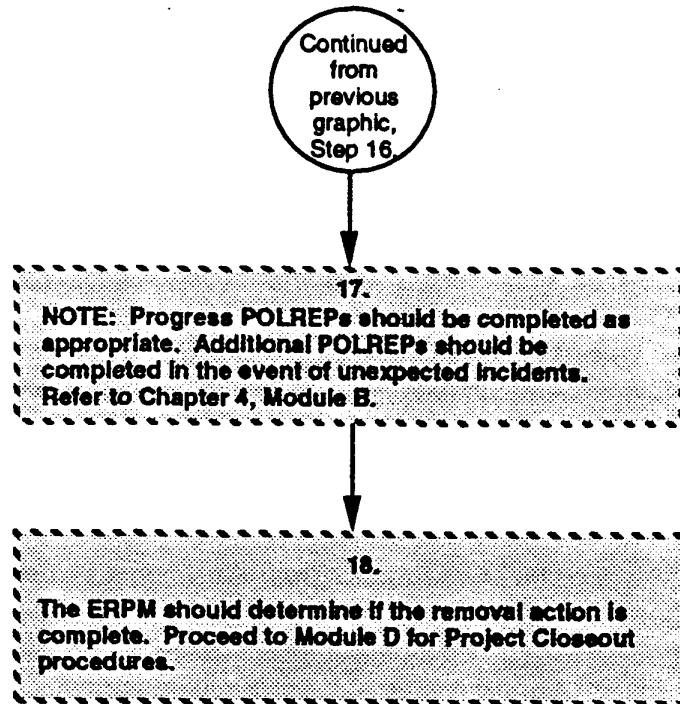
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- Step 6** The ERPM determines whether the site is or may be a National Priorities List (NPL) site or whether the non-time-critical removal action will or may be followed by a remedial action. In accordance with NCP section 300.415(c), the removal action must, to the extent applicable, contribute to the efficient performance of any anticipated long-term remedial action. Also, if the site is not already on the NPL, sample collection and analysis plans should ensure that data generated will also support further assessment for NPL listing, if appropriate. If the site is on the NPL, many of the required studies and reports concerning the physical, demographic, and other characteristics of the site and surrounding areas are likely to have already been completed. These studies and reports may contain information relevant to completing a HASP, Sampling and Analysis Plan, or other required documentation.
- Step 7** The ERPM should ensure that all workers at the non-time-critical action understand and follow site-specific safety protocols. Responsibilities include determining safety zones, levels of required personal protection, and adequate training of all response personnel. The ERPM should refer to Chapter 6, Module B, Step 6 in ensuring worker safety.
- Step 8** The ERPM should determine if the non-time-critical removal action requires sampling and analysis beyond that already collected during the EE/CA and RSE. In many cases, additional sampling will not be necessary.
- Step 9** The ERPM should complete a site-specific sampling and analysis plan. *Section 300.430(b)(8) of the NCP requires that this plan be approved by EPA in order to obtain data of sufficient quality and quantity to satisfy data needs.* The plan consists of two parts: the field sampling plan, which describes the number, type, and location of samples and the types of analyses; and the quality assurance project plan, which describes policy, organization, and functional activities and the data quality objectives and measures necessary to achieve adequate data.
- Step 10** See Chapter 4, Module E, Step 8.

Figure 7.4(3)
Non-Time-Critical Removal Action Implementation



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- Step 11** The ERPM should review local and facility contingency plans to aid response actions (see Chapter 4, Module E, Step 9).
- Step 12** An Action Memorandum and EE/CA should have been prepared before initiating the non-time-critical removal action. The EE/CA identifies and analyzes removal action alternatives. The Action Memorandum describes the threat and specific activities that are to be completed. The Action Memorandum is completed after the public comment period on the EE/CA has closed. See Module B for guidance on preparing an EE/CA, and Chapter 4, Module C for guidance on preparing an Action Memorandum.
- Step 13** In general, non-time-critical removal actions should consider and comply with all ARARs. Sufficient time should be available during a non-time-critical removal action to ensure that ARARs determinations are based upon a reasonable understanding of site characteristics. Specifically, preparation of the EE/CA should allow the ERPM to evaluate ARARs more fully.
- Step 14** Since non-time-critical actions typically respond to controlled or chronic sources of contamination, the need for evacuation is unlikely during a non-time-critical removal action. If an emergency situation arises during the cleanup activities that necessitates an evacuation, the ERPM should refer to Chapter 4, Module E, Step 12.
- Step 15** As described in Module A, non-time-critical removal actions require more community relations and Administrative Record file activities than emergency or time-critical removal actions. The ERPM is encouraged to consider additional public participation activities in order to keep the community informed.
- Step 16** See Chapter 4, Module B.

Figure 7.4(4)
Non-Time-Critical Removal Action Implementation



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- Step 17** Progress POLREPs are completed following major accomplishments or unexpected incidents. For example, a POLREP should be completed after the EE/CA Approval Memorandum is signed. See Chapter 6, Module B and Chapter 4, Module E, Step 14.
- Step 18** Following control of the release, the ERPM should determine if the non-time-critical removal action has completely addressed threats to public health, welfare, and the environment, and if no further response actions are necessary. This determination is based on achieving the removal action objectives as described in the Action Memorandum. The method for this determination may vary with the site and response activities. The determination may be based on completing all activities, best professional judgment, or agreement with EPA and state officials. If the non-time-critical removal action has completely addressed all threats, the ERPM should proceed to Module D, which describes closeout procedures for non-time-critical removal actions.

7.5 Module D: Non-Time-Critical Removal Action Closeout

7.5.1 Introduction

The ERPM ensures that the objectives of the non-time-critical removal action are met and that there is no further threat to public health, welfare, or the environment. If a threat continues to exist, then the ERPM should continue removal action activity or examine other actions that may be taken to prevent, abate, or mitigate the threat. After determining that the action is complete, the ERPM ensures that any PRSC activities are conducted and completes final reports indicating the site is complete. Completion of a non-time-critical removal action may remediate the contamination at an NPL site. In many cases, however, a non-time-critical removal action may achieve prompt risk reduction prior to a remedial action. In these cases, the site may qualify for NPL delisting using the NPL delisting procedures outlined in EPA Publication "Procedures for Completion and Deletion of NPL Sites," April 1989.

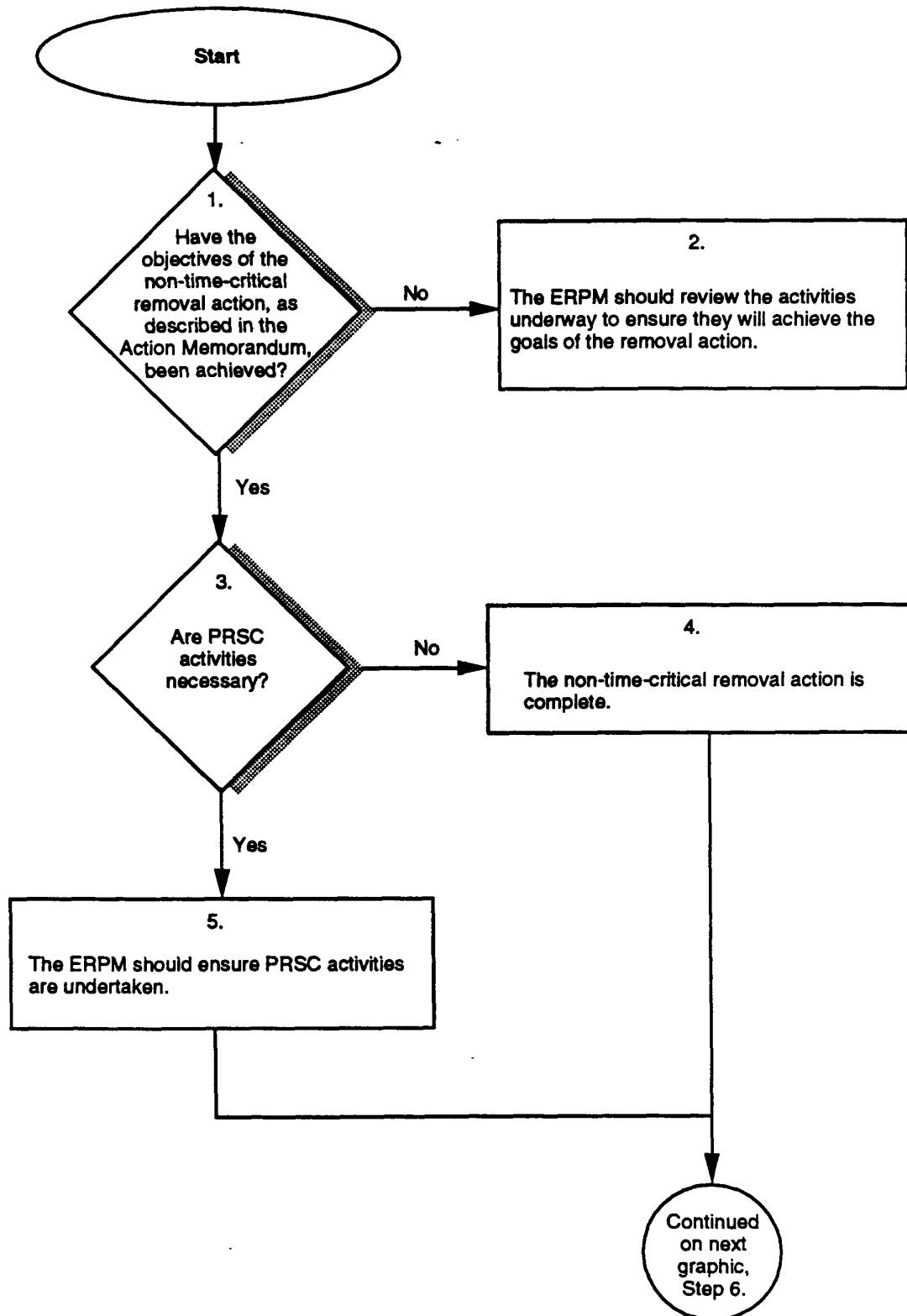
7.5.2 Milestones

In closing out a non-time-critical removal action, the ERPM should ask the following questions:

- Have all removal action objectives been met, as outlined in the Action Memorandum?
- Are PRSC measures required to ensure the integrity of the non-time-critical removal action?
- Are additional removal actions or remedial actions required to protect public health and the environment?

The following flowchart guides you through the process of closing out a non-time-critical removal action.

Figure 7.5(1)
Non-Time-Critical Removal Action Closeout



7.5.3 Non-Time-Critical Removal Action Closeout

- Step 1** The ERPM determines when the removal action objectives have been met and the project is complete (see Chapter 4, Module F, Step 1).
- Step 2** See Chapter 4, Module F, Step 2.
- Step 3** Since non-time-critical removal actions may involve treatment technologies, frequently PRSC activities are required. See Chapter 4, Module F, Step 3 for examples of PRSC activities.
- Step 4** See Chapter 6, Module C, Step 4.
- Step 5** See Chapter 6, Module C, Step 5.

Step 6 See Chapter 6, Module C, Step 7.

Step 7 All required final removal action reports should be completed as described in Chapter 4, Module B. In addition, the ERPM should follow the remedial procedures for site completion in cases where the site is on the NPL and the non-time-critical removal action is the final cleanup for the site. See section 300.435 of the NCP and EPA Publication No. 9320.2-03A and -03B, "Procedures for Completion and Deletion of National Priorities List Sites and Update," April 1989. Many non-time-critical removal actions are taken at NPL sites to speed the remediation of the site. In certain cases, non-time-critical removal actions may be used as the final remediation activity of the site. In these cases, follow the remedial procedures for site completion.

Step 8 A non-time-critical removal action may completely abate, prevent, and remediate releases or threats of releases from the site. In this case, the ERPM should demobilize contractors from the site. Any required final reports, as described in Chapter 4, Module B also should be completed. Specifically, for most non-time-critical removal actions, an OSC Report is likely to be required pursuant to section 300.165 of the NCP (see Chapter 4, Module B, Steps 5 and 6). Regulatory agency concurrence may be required by FFAs or IAGs with EPA or the state. Following concurrence by appropriate regulatory agencies and DOE officials, the site is then considered complete and no further actions are required.

7.6 Summary Milestones for Chapter 7

		YES	NO	N/A
Module A	In developing a public outreach program and the Administrative Record for non-time-critical removal actions, the ERPM should ask the following questions:			
	Has a DOE spokesperson for the non-time-critical removal action been designated?	_____	_____	_____
	Have community interviews been conducted?	_____	_____	_____
	Has a formal CRP been prepared?	_____	_____	_____
	Have a local information repository and Administrative Record file been established before the EE/CA Approval Memorandum was signed?	_____	_____	_____
	Has notice of the availability and contents of the EE/CA and Administrative Record file been published in a major local newspaper?	_____	_____	_____
	Have the EE/CA and Administrative Record file been publicly available for review and comment for at least 30 days?	_____	_____	_____
	Has the public comment period been extended by at least 15 days, if requested?	_____	_____	_____
	Have written responses to significant comments been prepared?	_____	_____	_____
Module B	In conducting an EE/CA for non-time-critical removal actions, the ERPM should ask the following questions:			
	Has an EE/CA Approval Memorandum been prepared and submitted to appropriate DOE officials?	_____	_____	_____

	YES	NO	N/A
Has the EE/CA been approved?	_____	_____	_____
Have a HASP and Sampling and Analysis Plan been approved?	_____	_____	_____
Have site visits and sampling analyses been conducted?	_____	_____	_____
Does the EE/CA:			
– Describe the site and nature of the threat?	_____	_____	_____
– Identify removal action objectives?	_____	_____	_____
– List and analyze each alternative?	_____	_____	_____
– Recommend one alternative?	_____	_____	_____
Has the EE/CA been placed in the Administrative Record file?	_____	_____	_____
Module C			
In implementing non-time-critical removal actions, the ERPM should ask the following questions:			
Has an EE/CA and Action Memorandum been completed?	_____	_____	_____
Does DOE have sufficient resources to conduct the removal action?	_____	_____	_____
Has a POLREP been completed?	_____	_____	_____
Has a HASP been prepared during the RSE, and have health and safety requirements been communicated to the response team?	_____	_____	_____
Have the field Sampling Plan and Quality Assurance Project Plan been completed and approved by EPA?	_____	_____	_____
Are proposed and actual removal action activities consistent with local/facility contingency plans?	_____	_____	_____

	YES	NO	N/A
Has the Action Memorandum been completed?	_____	_____	_____
Is evacuation of facility personnel and/or local community required?	_____	_____	_____
Are community relations activities underway?	_____	_____	_____
Were other federal and state responders or technical assistance units notified?	_____	_____	_____
Have progress and special POLREPs been prepared, as required?	_____	_____	_____
Have removal action wastes been disposed of properly?	_____	_____	_____
Has the removal action Final Report been prepared?	_____	_____	_____
Is the non-time-critical removal action complete?	_____	_____	_____
Are further response actions necessary at the site?	_____	_____	_____
Module D			
In closing out a non-time-critical removal action, the ERPM should ask the following questions:			
Have all removal action objectives been met, as outlined in the Action Memorandum?	_____	_____	_____
Are PRSC measures required to ensure the integrity of the non-time-critical removal action?	_____	_____	_____
Are additional removal or remedial actions required to protect public health and the environment?	_____	_____	_____

7.7 Sample Scenarios

This chapter identified the procedures for completing non-time-critical removal actions to respond to a release or threat of release of a hazardous substance or pollutant or contaminant. Specifically, the chapter focused on the differences between a non-time-critical removal action and an emergency or time-critical removal action. In general, the differences can be summarized as follows: 1) additional time is available for conducting outreach activities and additional NCP requirements exist for public participation and the Administrative Record, 2) an EE/CA must be conducted, and 3) coordination with remedial actions at NPL sites is likely. The following four scenarios will further clarify your knowledge of the process for conducting non-time-critical removal actions.

- Scenario 1:** Following the discovery of a leak from a 35,000-gallon acid bath tank during decommissioning, a non-time-critical removal action was taken to remediate the release. The response was closely monitored by the local media and, as a result, the spill was classified a major release. Therefore, following completion of the response, a Final Report was prepared in compliance with NCP section 300.165. The report was sent to the NRT and RRT.
- Scenario 2:** During the remediation of an NPL site, an old waste pit filled with barrels was discovered. To address the source of contamination, a non-time-critical removal action was taken. As part of the EE/CA process, two alternatives were identified for addressing the site. One alternative was to incinerate the wastes on-site using the existing incinerator constructed for the remedial action. The second alternative was to haul the barrels to a legal disposal site. The EE/CA recommended incineration of the wastes on-site. Numerous public comments were received addressing the recommended option and its impacts on the area. A response to significant comments was prepared addressing the public comment issues. The response considered each of the public comments. As a result, the Action Memorandum presented a revised recommended removal action alternative. The removal action implemented the on-site incineration alternative, but at a lower volume per day to ensure that environmental permits were not exceeded.
- Scenario 3:** Following the RSE, the ERPM determined that a non-time-critical removal action was the appropriate response. Public participation activities were initiated immediately. The ERPM then assembled a team to conduct an EE/CA at the site. The team included personnel for reviewing the site history, conducting sampling and analysis, and completing technical and cost evaluations of technologies capable of remediating the site. During the evaluation of the engineering options, the ERPM amended DOE's approach to include completing a treatability study. Following this study, the EE/CA was completed and placed in the Administrative Record file.

Scenario 4: After reviewing the requirements for community relations and the Administrative Record, the ERPM requested additional support from facility personnel. The ERPM assigned a public participation specialist to act as the site spokesperson and received support from other personnel for developing and staffing the information repository. The ERPM decided to coordinate the CRP and response to significant comments on the EE/CA. This coordination effort enabled DOE to meet the regulatory requirements and enhance the public's understanding of DOE remediation operations.

7.8 References

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2. Code of Federal Regulations, Title 29, Part 1910, Occupational Safety and Health Standards.
3. Code of Federal Regulations, Title 40, Part 300, National Oil and Hazardous Substances Pollution Contingency Plan (NCP).
4. Code of Federal Regulations, Title 40, Part 302, Designation, Reportable Quantities, and Notification.
5. Code of Federal Regulations, Title 40, Part 311, Worker Protection.
6. Code of Federal Regulations, Title 40, Part 355, Emergency Planning and Notification.
7. 15 U.S.C. §2601 *et. seq.* The Toxic Substances Control Act (TSCA).
8. 33 U.S.C. §1251 *et. seq.* The Federal Water Pollution Control Act (FWPCA) as amended by the Clean Water Act of 1977 (CWA).
9. 33 U.S.C. §2701 *et. seq.* The Oil Pollution Act of 1990 (OPA).
10. 42 U.S.C. §2011 *et. seq.* The Atomic Energy Act of 1954 (AEA).
11. 42 U.S.C. §6901 *et. seq.* The Resource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments (HSWA).
12. 42 U.S.C. §7901 *et. seq.* The Uranium Mill Tailings Radioactive Control Act of 1978 (UMTRCA).
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